

## **Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims**

1. (Currently amended) A method, comprising:  
operating in a multiple input, multiple output (MIMO) mode by a wireless network device of a wireless network, the wireless network including at least one transmitter device and a plurality of receiver devices, the wireless network device being one of the receiver devices; and  
in the event of a predetermined condition, the wireless network device switching from operating in the MIMO mode to operating in a spatial division, multiple access (SDMA) mode.
2. (Original) A method as claimed in claim 1, wherein the predetermined condition includes a latency value exceeding a predetermined value.
3. (Original) A method as claimed in claim 1, wherein the predetermined condition includes a throughput value being below a predetermined value.
4. (Original) A method as claimed in claim 1, wherein the predetermined condition includes a number of collisions exceeding a predetermined value.
5. (Currently amended) A method as claimed in claim 1, wherein the predetermined condition includes a desire to obtain a desired-higher spectral efficiency than a spectral efficiency obtained by operating in a MIMO mode.

6. (Currently amended) A method as claimed in claim 1, wherein the predetermined condition includes a number of ~~the receiver devices~~receivers exceeding a predetermined value.

7. (Currently amended) A method, comprising:  
operating in a spatial division, multiple access (SDMA) mode by a wireless network device of a wireless network, the wireless network including at least one transmitter device and a plurality of receiver devices, the wireless network device being one of the receiver devices; and  
in the event of a predetermined condition, the wireless network device switching from operating in the SDMA mode to operating in a multiple input, multiple output (MIMO) mode.

8. (Original) A method as claimed in claim 5, wherein the predetermined condition includes a spectral efficiency per user being below a predetermined value.

9. (Original) A method as claimed in claim 5, wherein the predetermined condition includes a data rate being below a predetermined value.

10. (Currently amended) A method as claimed in claim 5, wherein the predetermined condition includes a desire to obtain a desired higher data rate for at least one user than a data rate obtained for the at least one user by operating in a SDMA mode.

11. (Currently amended) A method as claimed in claim 5, wherein the predetermined condition includes a desire to obtain a desired higher quality of service for at least one user than the a quality of service obtained by operating in a SDMA mode.

12. -14. (Cancelled)

15. (Currently amended) An article, comprising:  
a storage medium having stored thereon instructions that, when executed by a computing platform, result in adaptive switching between a multiple input, multiple output (MIMO) mode and a spatial division, multiple access (SDMA) mode by:  
operating in a ~~multiple input, multiple output~~MIMO mode, ~~the computing platform being at least a part of a wireless network device of a wireless network, the wireless network including at least one transmitter device and a plurality of receiver devices, and the wireless network device being one of the receiver devices; and~~  
in the event of a predetermined condition, ~~the wireless network device switching from operating in the MIMO mode to~~ operating in a ~~spatial division, multiple access~~SDMA mode.
16. (Original) An article as claimed in claim 15, wherein the predetermined condition includes a latency value exceeding a predetermined value.
17. (Original) An article as claimed in claim 15, wherein the predetermined condition includes a throughput value being below a predetermined value.
18. (Original) An article as claimed in claim 15, wherein the predetermined condition includes a number of collisions exceeding a predetermined value.
19. (Currently amended) An article as claimed in claim 15, wherein the predetermined condition includes a ~~desire to obtain a desired~~ higher spectral efficiency ~~than a spectral efficiency obtained by operating in a MIMO mode~~.
20. (Currently amended) An article as claimed in claim 15, wherein the predetermined condition includes a number of ~~the receiver devices~~receivers exceeding a predetermined value.

21. (Currently amended) An article, comprising:  
a storage medium having stored thereon instructions that, when executed by a computing platform, result in adaptive switching between a multiple input, multiple output (MIMO) mode and a spatial division, multiple access (SDMA) mode by:  
operating in a ~~spatial division, multiple access~~SDMA mode, the computing platform being at least a part of a wireless network device of a wireless network, the wireless network including at least one transmitter device and a plurality of receiver devices, and the wireless network device being one of the receiver devices; and  
in the event of a predetermined condition, the wireless network device switching from operating in the SDMA mode to operating in a MIMO~~multiple input, multiple output~~ mode.
22. (Original) An article as claimed in claim 21, wherein the predetermined condition includes a spectral efficiency per user being below a predetermined value.
23. (Original) An article as claimed in claim 21, wherein the predetermined condition includes a data rate being below a predetermined value.
24. (Currently amended) An article as claimed in claim 21, wherein the predetermined condition includes a desire to obtain a desired-higher data rate for at least one user ~~than a data rate obtained by operating in a SDMA mode.~~
25. (Currently amended) An article as claimed in claim 21, wherein the predetermined condition includes a desired higher quality of service for at least one user.
- 26.-28. (Cancelled)

29. (Currently amended) An apparatus, comprising:

a transceiver to receive signals from a transmitter device of a wireless network, the wireless network including the transmitter device and a plurality of receiver devices, the apparatus being at least a part of one of the receiver devices;

at least two or more omnidirectional antennas to couple to said transceiver; and  
a baseband processor to couple to said transceiver, wherein said baseband processor and said transceiver switch from a multiple input, multiple output (MIMO) mode to a spatial division, multiple access (SDMA) mode under a first condition, and switch from a ~~SDMA~~spatial division, multiple access mode to a MIMOmultiple input, multiple output mode under a second condition.

30. (Currently amended) An apparatus as claimed in claim 29, wherein the first condition includes at least one of a higher latency, a lower throughput, a higher number of retransmits, and a higher number of receiver devices~~receivers~~ than a latency, throughput, retransmits, and number of receiver devices, respectively, obtained through the SDMA mode.

31. (Currently amended) An apparatus as claimed in claim 29, wherein the second condition includes at least one of a lower signal-to-noise ratio, a higher bit error rate, a lower spectral efficiency, a desired higher data rate for at least one receiver device, a desired higher quality of service for at least one receiver device, and a lower number of receiver devices~~receivers~~ than what can be obtained through the MIMO mode.